

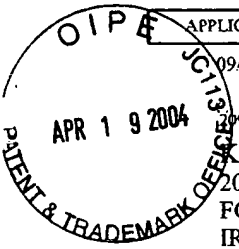
MIROBIO. 026DV2 NSA

TRA/ETA



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,580	03/12/2001	Michael P. Maher	AUROBIO.026DV2	5039

20995 7590 05/21/2003  
KNOBBE MARTENS OLSON & BEAR LLP  
2040 MAIN STREET  
FOURTEENTH FLOOR  
IRVINE, CA 92614

EXAMINER

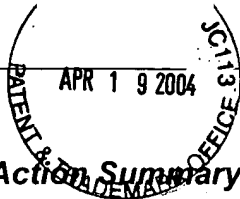
REDDING, DAVID A

ART UNIT PAPER NUMBER

1744

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



# Office Action Summary

Application No. 09/804,580	Applicant(s) MAHER ET AL.	
Examiner David A Redding	Art Unit 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 and 48-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 and 48-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other:  |

Art Unit: 1744

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of claims 1-39,48-50 in Paper No. 12 is acknowledged.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-39,48-50 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of copending Application No. 09/804,458 in view of USP 6,376,233 B1 (Wolf et al). The Wolf et al. patent discloses the measuring of fluorescence in combination with electronic measurements (col.3, lines 55-64). It would have been obvious to include the optical measurement means of the Wolf et al. patent in view of the known use of the measurement means with electrical measurement means.

This is a provisional obviousness-type double patenting rejection.

Art Unit: 1744

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Redding whose telephone number is 703-308-3910. The examiner can normally be reached on M,T,Th,Fr, 7:30-6:00pm.

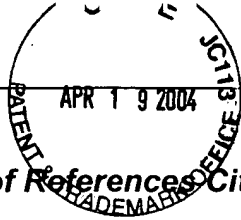
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on 703-308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



David A Redding  
Primary Examiner  
Art Unit 1744

D.A.R.  
May 19, 2003



# Notice of References Cited

Application/Control No.

09/804,580

Applicant(s)/Patent Under  
Reexamination  
MAHER ET AL.

Examiner

David A Redding

Art Unit

1744

Page 1 of 1

## U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
✓	A	US-6,376,233 B1	04-2002	Wolf et al.	435/288.4
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

## FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

## NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

PTO-1442

3 2001

INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

TRADEMARK (T)

(USE SEVERAL SHEETS IF NECESSARY)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
AUROBIO.026DV2APPLICATION NO.  
09/804,580APPLICANT  
Maher, et al.FILING DATE  
March 21, 2001GROUP  
1743

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AUG 14 2001

1700

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
TON	48	Plonsey, Med & Biol. Eng. & Comput. 19 311-315 (1981).
TON	49	Plonsey, Med. & Biol. Eng. & Comput. 33 337-340 (1995).
TON	50	Plonsey and Barr, IEEE 42 329-336 (1995).
TON	51	Plonsey and Barr, IEEE 9/10 130-137 (1998.)
TON	52	Rattay, Neuroscience 89 335-346 (1999).
TON	53	Roth, Critical Reviews in Biomed. Eng. 22 263-305 (1994).
TON	54	Rowell, Biophotonics Int. 12 25-26 (2000).
TON	55	Schmidt et al., Proc. Natl. Acad. Sci. USA 94 8948-8953 (1997).
TON	56	Stone et al., J. Cardiovascular Electrophysiology 10 92-107 (1999).
TON	57	Svirskis et al., American Phys. Soc. 0022-3077 579-586 (1997).
TON	58	Tung and Borderies, Biophys. J. 63 371-386 (1992).
TON	59	Tung et al., Circulation Research 69 722-730 (1991).
TON	60	Zhou, et al., Circulation Research 83 1003-1014 (1998).

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EXAMINER <i>Edward R. Kelly</i>	DATE CONSIDERED <i>4/11/03</i>
<p>*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.</p>	

PTO-1449

1 3 2001

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
AUROBIO.026DV2APPLICATION NO.  
09/804,580INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

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APPLICANT  
Maher, et al.FILING DATE  
March 21, 2001GROUP  
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AUG 14 2001

TC 1700

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
DAZ	27	6,046,002	4/4/00	Davis, et al.	435	6	
DAZ	28	6,051,422	4/18/00	Kovacs, et al.	435	287.1	
DAZ	29	6,063,260	5/16/00	Olesen, et al.	205	793	
DAZ	30	6,099,960	8/8/00	Tennent, et al.	428	367	
DAZ	31	6,205,016	3/20/01	Niu	361	503	

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
DAZ	32	WO97/05922	2/20/97	PCT	—	—		
DAZ	33	WO00/25121	5/4/00	PCT	—	—		
DAZ	34	WO00/68686	11/16/00	PCT	—	—		
DAZ	35	1 067 378 A1	1/10/01	EPO	—	—		

## OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

EXAMINER INITIAL		
DAZ	36	Amdts. Oral Presentation Abstract, Second International Cell Analysis Products Users Meeting in Hilton Head Island, South Carolina, USA (June 3-5, 1998).
DAZ	37	Barr and Plonsey, Biophys. J. 61, 1164-1175 (1992).
DAZ	38	Barr and Plonsey, IEEE 42, 1185-1191 (1995).
DAZ	39	Cartee and Plonsey, Med & Biol. Eng. & Comp. 30 389-398 (1992).
DAZ	40	Cartee and Plonsey, IEEE 39, 76-85 (1992).
DAZ	41	Eppich et al., Nature Biotech. 18, 882-887 (2000).
DAZ	42	Greenberg, et al. IEEE 46, 505-514 (1999).
DAZ	43	Gross, et al. Biophys. J. 50, 339-348 (1986).
DAZ	44	Jentsch and Günther, BioEssays 19, 117-126 (1997).
DAZ	45	Klee and Plonsey, Biophys. J. 12 1661-1675 (1972).
DAZ	46	Klee and Plonsey, IEEE 23, 347-354 (1976).
DAZ	47	Mitchell et al., J. Biomed. Eng. 14, 52-56 (1992).

EXAMINER

Daniel Reddy

DATE CONSIDERED

4/11/03

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PTO-147  
1 3 2001

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.  
AUROBIO.026DV2

APPLICATION NO.  
09/804,580

INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

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APPLICANT  
Maher, et al.

FILING DATE  
March 21, 2001

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U.S. PATENT DOCUMENTS

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DM	1	4,072,578	2/7/78	Cady, et al.	195	187	
DM	2	4,514,500	4/30/85	Giaever, et al.	435	241	
DM	3	4,461,304	7/24/84	Kuperstein	128	642	
DM	4	4,628,933	12/16/86	Michelson	128	4192	
DM	5	4,677,989	7/7/87	Robblee	128	784	
DM	6	4,969,468	11/13/90	Byers, et al.	128	642	
DM	7	5,024,233	6/18/91	Chow	128	4192	
DM	8	5,178,161	1/12/93	Kovacs	128	784	
DM	9	5,187,096	2/16/93	Giaever, et al.	435	291	
DM	10	5,405,367	4/11/95	Schulman, et al.	607	61	
DM	11	5,432,086	7/11/95	Fränzl, et al.	435	291	
DM	12	5,439,440	8/8/95	Hofmann	604	30	
DM	13	5,545,130	8/13/96	Hofmann, et al.	604	4	
DM	14	5,563,067	10/8/96	Sugihara, et al.	435	287.1	
DM	15	5,571,158	11/5/96	Bolz, et al.	607	121	
DM	16	5,810,725	9/22/98	Sugihara, et al.	600	372	
DM	17	5,855,801	1/5/99	Lin, et al.	216	2	
DM	18	5,935,155	8/10/99	Humayun, et al.	607	54	
DM	19	5,957,958	9/28/99	Schulman, et al.	607	56	
DM	20	5,965,452	10/12/99	Kovacs	436	149	
DM	21	5,981,268	11/9/99	Kovacs, et al.	435	287.1	
DM	22	6,008,038	12/28/99	Kröger, et al.	435	285.2	
DM	23	6,009,347	12/28/99	Hofmann	604	21	
DM	24	6,024,702	2/15/00	Iversen	600	378	
DM	25	6,031,711	2/29/00	Tennent, et al.	361	303	
DM	26	6,038,478	3/14/00	Yuen, et al.	607	74	

EXAMINER

David R. Ritz

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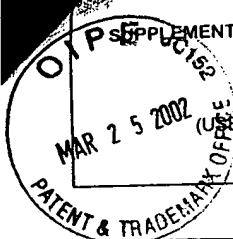
**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT**

APPLICANT  
Maher, et al.

FILING DATE  
March 12, 2001

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1743

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## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

[illegible]

**EXAMINER  
INITIAL**

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

INITIAL		
<i>[Signature]</i>	2.	González, J.E., et al., "Cell-based assays and instrumentation for screening ion-channel targets", Drug Discover Today, Vol. 4, No. 9, pp. 431-439, (September 1999).
<i>[Signature]</i>	3.	González, J.E., et al., "Voltage sensing by fluorescence resonance energy transfer in single cells", Biophysical Journal, Vol. 69, No. 4, pp. 1272-1280, (October 1995).
<i>[Signature]</i>	4.	Giuliano, K.A., et al., "Fluorescent-protein biosensors: new tools for drug discovery", Trends In Biotechnology", Vol. 16, No. 3, pp. 135-140, (March 1998).

EXAMINER <i>Ron Rude</i>	DATE CONSIDERED <i>4/11/03</i>
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